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EXAMINER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/737,076	Applicant(s) NELSON ET AL.	
	Examiner TERESA WOODS	Art Unit 3686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 2-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/16/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/16/03, 5/27/05, 6/3/05, 10/11/05, 2/27/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice to Applicant

1. This communication is in response to the Request for Continued Examination filed 12/15/09. Claims 1, 12, 22 30 and 36 had been amended when filed 04/08/09. Claims 2-4 have been cancelled. Claims 1 and 5-38 remain pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 5, 8, 12-16, 20-21, 30-34, 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLuca (US 6,440,067) in view of Rogers (US 6,957,107 B2).

5. **Claim 1:**

DeLuca, as shown, discloses the following limitations:

- *monitoring, by a computing device having a computer processor and computer-readable code stored on a computer-readable medium and executable by the computer processor, a sensor activated by an individual* (See at least Fig. 2A-D, Fig. 4, Fig. 10, column 2, lines 36-46, column 5, lines 50-55). In the second citation, the computer program serves as a computer-readable medium.
- *determining a behavior routine of the individual with the computing device based on recorded activations of the sensor* (See at least Fig. 1, Fig. 3, Fig. 4, column 2, lines 26-44, column 11, lines 55-59). In the first citation, comparing serves as analysis. In the second citation, tabulated signals are taught.
- *analyzing the recorded sensor activations with the computing device to determine a behavior routine* (See at least Fig. 1, Fig. 3, Fig. 4, column 2, lines 26-44, column 11, lines 55-59). In the first citation, comparing serves as analysis. In the second citation, tabulated signals are taught.
- *identifying a change in the behavior routine with the computing device based on the analysis of the recorded sensor activations* (See at least Fig. 1, Fig. 3, Fig. 4, column 2, lines 26-44, column 11, lines 55-59).

DeLuca discloses the limitations mentioned above. DeLuca does not disclose recorded third contact initiation. However, Rogers discloses:

- *recording activation of the sensor on a the computing device in communication with the sensor* (See at least Fig. 2, Fig. 2A, Fig. 3, column 3, lines 33-40).
- *initiating contact to a third party on a hierarchical list of third party contacts with the computing device in response to identifying the change in the behavior*

routine, Wherein the third party on the hierarchical list to contact is selected based on a level of change in the behavior routine (See at least Fig. 2, Fig. 2A, Fig. 9, Fig. 10, column 16, line 30 to column 17, line 25).

Here, both a computing device and a hierarchical list of third party contacts are taught. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca's activity monitoring with the hierarchal computing device in communication with the sensors of Rogers for a comprehensive sensing method to better diagnose patients and notify the appropriate medical staff since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

6. Claim 5:

DeLuca and Roger does not disclose the following limitation, but Roger discloses *further including initiating automated contact with a third party on a hierarchical list of third party contacts* (See at least Fig. 2, Fig. 2A, Fig. 5, Fig. 10, column 16, lines 43-58, column 17, lines 1-25). In the second citation, the hierarchy of contact serves as the hierarchical list to contact. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Roger's activity monitoring with the hierarchal computing device in communication with the sensors of Rogers for a comprehensive sensing method

to better diagnose patients and notify the appropriate medical staff since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

7. Claim 8:

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitations, but DeLuca further discloses:

- *wherein the method further includes providing a sensor with a level of priority* (See at least Fig. 9, column 11; lines 8-31).

8. Claim 12:

DeLuca, as shown, discloses the following limitations:

- *recording, by a computing device having a computer processor and computer-readable code stored on a computer-readable medium and executable by the computer processor, data counts from sensors activated by an individual during a time period on a the computing device in communication with the sensors to determine a behavior routine of the individual* (See at least Fig. 2A-D, Fig. 4, Fig. 10, column 3, lines 48-65, column 5, lines 50-55). In figures 2 and the second citation, teach data counts from sensors activated by an individual during a time period. In the first citation, the computer program serves as a computer-readable medium.
- *identifying statistical changes in the data counts relative to expected data counts during the time period with the computing device* (See at least Fig. 2A-D, Fig. 4, Fig. 10, column 11, lines 36-44). In figures 2, data counts during the time period are taught. Here, the known statistical signal processing know as receiving operating characteristics serves as identifying statistical changes in the data counts.

DeLuca discloses the limitations mentioned above. DeLuca does not disclose recorded third contact initiation. However, Rogers discloses:

- *initiating automated contact to a third party on a hierarchical third party list with the computing device identified by the individual when a statistical change exceeds a statistical threshold value, wherein the third party on the hierarchical list to contact is selected based on a level of statistical change* (See at least Fig. 2, Fig. 2A, Fig. 9, Fig. 10, column 16, line 30 to column 17, line 25).

Here, both a contacting unit and a hierarchical list of third party contacts are taught. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca's activity monitoring with the hierarchal computing device in communication with the sensors of Rogers for a comprehensive sensing method to better diagnose patients and notify the appropriate medical staff since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

9. Claim 13:

DeLuca discloses *"associating the data count with an activity of daily living; and placing the data counts into groups based on activities of daily living* (See at least Fig. 1-10, Abstract, column 2; lines 25-45). Here, stored data serves as data counts.

10. Claim 14:

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but Rogers further discloses *"wherein initiating automated contact to a third party on a hierarchical third party list includes analyzing the data counts in a group for statistical change that exceeds the statistical threshold value"* (See at least Fig. 2, Fig. 2A, Fig. 9, Fig. 10, column 16, line 30 to column 17, line 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's ability to notify staff and keeping records to Roger's placement of data counts to provide quality diagnosis from trained staff which would provide beneficial treatment to medical patients since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

11. Claim 15:

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but Rogers further discloses *"further including setting the time period to a value of one (1) hour or greater"* (See at least column 6; lines 4-5). Here, 24 hour monitoring serves as greater than an hour.

12. Claim 16:

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but DeLuca further discloses *“wherein initiating automated contact to a third party on a hierarchical third party list includes identifying at least two statistical based changes that exceed the statistical threshold value”* (See at least Fig. 4, column 18; lines 1-2, column 26; lines 9-21). In this reference, the activity-base rate sensors, mentioned above in the limitations of claim 6, are further displayed as a range in sensor counts that signal adjustments once the threshold is overcome.

13. Claim 20:

DeLuca discloses the following limitations:

- *developing an expected count for the activity of daily living over the time period* (See at least Fig. 4, column 7, lines 19-23). Here, the function activity identification serves as determining a behavior routine.

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but Rogers further discloses:

- *initiating automated contact to a third party on the hierarchical third party list when the recorded counts are statistically less than the expected count for the activity of daily living over the time period* (See at least Fig. 2, Fig. 2A, column 9, lines 24-30).

In the first citation, the programmable monitored data has thresholds similar to statistical data counts. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca's activity monitoring with the hierarchal third party list of Rogers for a comprehensive sensing method to better diagnose patients and notify the appropriate medical staff since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

14. **Claim 21:**

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but Rogers further discloses *"wherein initiating automated contact to a third party on a hierarchical third party list includes prompting the individual to confirm that automated contact to the third party should be made"* (See at least Fig. 2, Fig. 2A, Fig. 9, Fig. 10, column 16, line 30 to column 17, line 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca's activity monitoring with the hierarchal computing device in communication with the sensors of Rogers for a comprehensive sensing method to better diagnose patients and notify the appropriate medical staff since so doing

could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

15. **Claim 30:**

DeLuca, as shown, discloses the following limitations:

- means for signaling that a sensor has been activated by an individual during activities of daily living (See at least Fig. 1, Fig. 3, Fig. 4, column 2, lines 26-44).
- a receiver to receive signals, indicating that the sensor has been activated (See at least Fig. 1, Fig. 3, Fig. 4, column 2, lines 26-44).
- a tabulation unit to tabulate the number of received signals (See at least Fig. 1, Fig. 3, Fig. 4, column 2, lines 26-44). Here, storing the data obtained serves as tabulating the number of received signals.
- an analysis unit to analyze the tabulated signals to determine a behavior routine and identify changes in the behavior routine (See at least Fig. 1, Fig. 3, Fig. 4, column 2, lines 26-44, column 11, lines 55-59). In the first citation, comparing serves as analysis. In the second citation, tabulated signals are taught.

DeLuca discloses the limitations mentioned above. DeLuca does not disclose recorded third contact initiation. However, Rogers discloses:

- a contacting unit to initiate contact with a third party selected from a hierarchical list of third party contacts when the analysis unit identifies a defined level change in the behavior routine (See at least Fig. 2, Fig. 2A, Fig. 9, Fig. 10, column 16, line 30 to column 17, line 25).

Here, both a computing device and a hierarchical list of third party contacts are taught. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca's activity monitoring

with the hierarchal contacting unit of Rogers for a comprehensive sensing method to better diagnose patients and notify the appropriate medical staff since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

16. **Claim 31:**

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but DeLuca further discloses:

- *wherein means for signaling includes a sensor worn by the individual (See at least Fig. 3, Fig. 4, column 5; lines 55-60).*

17. **Claim 32:**

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but DeLuca further discloses:

- *wherein the sensor worn by the individual is a sensor that is actuated when the sensor is located within range that includes a dwelling and a portion of land on which the dwelling is situated (See at least Fig. 3, Fig. 4, column 5; lines 55-60). Here, the location occupied by the subject serves as a dwelling and a portion of land on which the dwelling is situated.*

18. **Claim 33:**

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but DeLuca further discloses:

- *wherein means for signaling includes digital sensors* (See at least Fig. 3, Fig. 4, column 6; lines 36-45).

19. **Claim 34:**

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but DeLuca further discloses:

- *wherein the means for signaling includes analog sensors* (See at least Fig. 3, Fig. 4, column 6; lines 36-45).

20. **Claim 36:**

DeLuca, as shown, discloses the following limitations:

- a receiver to receive activation signals from a sensor activated by an individual during activities of daily living (See at least Fig. 1, Fig. 3, Fig. 4, column 2, lines 26-44).
- a processing unit to tabulate the received signals (See at least Fig. 1, Fig. 3, Fig. 4, column 2, lines 26-44).

DeLuca discloses the limitations mentioned above. DeLuca does not disclose recorded third contact initiation. However, Rogers discloses:

- a contacting unit to initiate contact with a third party selected from a hierarchical list of third party contacts based on a defined level of change in a behavior routine when directed by the processing unit (See at least Fig. 2, Fig. 2A, Fig. 9, Fig. 10, column 16, line 30 to column 17, line 25).

Here, both a computing device and a hierarchical list of third party contacts are taught. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca's activity monitoring with the hierarchal contacting unit of Rogers for a comprehensive sensing method to better diagnose patients and notify the appropriate medical staff since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

21. **Claim 37:**

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but DeLuca further discloses:

- *wherein the device is a self contained, stand-alone device* (See at least Fig. 3, Fig. 4, column 2; lines 59-65). Here, highly effective data teaches any reliability of a self contained, stand-alone device.

22. Claims 6, 7, 9, 10, 11 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLuca (US 6,440,067) in view of Rogers (US 6,957,107 B2) and in view of Nichols (US 5,330,513 A).

23. **Claim 6:**

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but Nichols discloses *"further including grouping sensors within particular classes of daily activities"* (See at least Fig. 1, Fig. 2, column 5; lines 59-68, column 48, lines 17-20). In this reference, the sensors are grouped into two categories according to the rate control parameters. One measures the activity-based rate. The other measures the pressure-base rate. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca's ability to monitor behavior sensors to Nichol's activity grouped sensors to provide optimum sensing to trouble-shoot patient problems since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

24. **Claim 7:**

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but Nichols

discloses *“wherein identifying a change in the at least one behavior includes comparing activations of a group of sensors within a class to a threshold”* (See at least Fig. 4, column 18; lines 1-2, column 26; lines 9-21). In this reference, the activity-base rate sensors, mentioned above in the limitations of claim 6, are further displayed as a range in sensor counts that signal adjustments once the threshold is overcome. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca's ability to monitor behavior sensors to Nichol's behavior changed activation to provide optimum sensing to trouble-shoot patient problems since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

25. **Claim 9:**

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but Nichols discloses *“wherein identifying a change in the behavior routine includes weighting sensor activations differently based upon the sensor's level of priority”* (See at least column 48; lines 12-20). This reference embodies the distinction between sensors based on pre-set parameters. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca's ability to monitor behavior sensors to Nichol's weighing sensors based on priority

levels to better understand the details involved with the diagnosis of any failed treatment since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

26. **Claim 10:**

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but Nichols discloses *“wherein analyzing the recorded sensor activations to determine a behavior routine includes using a pattern recognition algorithm”* (See at least column 45; lines 19-35). This reference embodies the analyzing factors to determine a needed rate set with an algorithm. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca's ability to monitor behavior sensors to Nichol's algorithm used to analyze behavior sensors to better understand the details involved with the diagnosis of any failed treatment since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

27. Claim 11:

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation, but Nichols discloses *“wherein using a pattern recognition algorithm includes using an algorithm based on a Bayesian decision theory* (See at least Fig. 21, Fig. 22, column 43, line 43 to column 44, line 48). Here, in Nichol’s histogram diagnostic algorithm, the premature ventricular contractions caused increments are statistical inferences serve as a Bayesian decision property. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca’s activity monitoring with a Bayesian decision theory algorithm of Nichols for a comprehensive sensing method to better diagnose any failed treatment or health of patients and to notify the appropriate medical staff.

28. Claim 38:

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose the following limitation. However, but Nichols further discloses *“wherein the device includes an additional functionality selected from: a radio, a clock radio, an alarm clock, a telephone, and an answering machine”* (See at least column 8; lines 34-45). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine

DeLuca and Rogers' device for monitoring activity to Nichol's functionality selections to provide better options needed to review any failed monitoring and treatment during diagnosis so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

29. Claims 17 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLuca (US 6,440,067) in view of Rogers (US 6,957,107 B2) and further in view of Official Notice.

30. **Claim 17:**

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose "*wherein recording data counts from a sensor includes recording data counts from a sensor with Boolean logic*". However, the Examiner takes **Official Notice** that it is old and well-known in the art Statistics to utilize Boolean logic when recording data counts for sensors to optimize methods needed to obtain accurate and dependable sensor readings. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to use Boolean logic to provide better options needed to review any failed monitoring and treatment during diagnosis.

31. **Claim 35:**

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not disclose *"wherein the analog sensors produce a Boolean output"*. However, the examiner takes **Official Notice** that it is old and well-known in the Electronics art for analog sensors to produce a Boolean output for optimized equipment needed to monitor any failed treatment for diagnosis. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine David's Boolean output with Nichol's notification of a third party of detailed analysis to provide an optimum variety of sensors needed to detect patient's activity and accuracy of monitoring because it would provide better healthcare for patients in remote locations away from a hospital.

32. Claim 18, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLuca (US 6,440,067) in view of Rogers (US 6,957,107 B2) and further in view of Kutzik (US 6,108,685 A).

33. Claim 18:

DeLuca and Rogers disclose the limitations as shown in the rejections above. DeLuca and Rogers do not also disclose the following limitations. However, Kutzik discloses “*further including self-diagnosing an operational condition of a monitoring system based on the recorded data counts*” (See at least column 17; lines 13-21). Here, there diagnostic sequence serves as self-diagnosing an operation condition. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca and Rogers' record of statistical changes in data counts to Nichol's self-diagnosis to provide quality diagnosis from trained staff and beneficial treatment to medical patients since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

34. Claim 19:

DeLuca and Roger disclose the limitations as shown in the rejections above. DeLuca and Roger do not disclose the following limitation, but Kutzik discloses “*further including diagnosing an operational condition of a sensor in the monitoring system*” (See at least column 17; lines 13-21). Here, there diagnostic sequence serves as self-diagnosing an operation condition. Therefore, it would

have been obvious to one of ordinary skill in the art at the time of the invention to combine DeLuca and Rogers' record of statistical changes in data counts to Nichol's self-diagnosis to provide quality diagnosis from trained staff and beneficial treatment to medical patients since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

35. Claims 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers (US 6,957,107 B2) in view of DeLuca (US 6,440,067).

36. **Claim 22:**

Rogers discloses the following limitations:

- *determining a statistical change in the data counts relative to expected data counts for the activity of daily living* (See at least Fig. 2, Fig. 2A, column 9, lines 24-30). In the first citation, the programmable monitored data has thresholds similar to statistical data counts.
- *identifying when the statistical change in the data counts relative expected data counts exceed a statistical threshold value* (See at least Fig. 2, Fig. 2A, column 9, lines 24-30).
- *selecting a third party on a hierarchical third party list based on the activity of daily living for which the statistical change in the data counts relative expected data counts exceed the statistical threshold value and a level of statistical change in the data counts* (See at least Fig. 2, Fig. 2A, Fig. 9, Fig. 10, column 9, lines 24-30, column 16, line 30 to column 17, line 25). In the first citation, the programmable monitored data has thresholds similar to statistical data counts. In the second citation, both a computing device and a hierarchical list of third party contacts are taught.

- *initiating automated contact to the third party on the hierarchical third party list when the statistical based change exceeds the statistical threshold value* (See at least Fig. 2, Fig. 2A, Fig. 9, Fig. 10, column 9, lines 24-30, column 16, line 30 to column 17, line 25).

Rogers discloses the limitations as shown in the rejections above. Rogers does not disclose the following limitation, but DeLuca further discloses:

- *sensing data counts associated with an activity of daily living for an individual* (See at least Fig. 4, column 6, lines 9-14).
- *determining a behavior routine of the individual based on the sensed data counts* (See at least Fig. 4, column 7, lines 19-23).

Here, the function activity identification serves as determining a behavior routine. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Rogers' activity monitoring with determining an individual's sensed data counts of DeLuca for a comprehensive sensing method to better diagnose patients and notify the appropriate medical staff since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

37. Claim 23:

Rogers and DeLuca disclose the limitations as shown in the rejections above. Rogers and DeLuca do not disclose the following limitation. However Rogers further discloses *"further including adjusting the expected data counts of*

an activity of daily living based upon the statistical change in the data counts for the activity of daily living" (See at least Fig. 2, Fig. 2A, column 9, lines 24-30).

38. Claim 24:

Rogers and DeLuca disclose the limitations as shown in the rejections above. Rogers and DeLuca do not disclose the following limitation. However, Rogers further discloses *"further including providing a predetermined amount of information about the individual and the activity of daily living to the third party on the hierarchical third party list"* (See at least Fig. 10, column 17; lines 15-67).

39. Claim 25:

Rogers and DeLuca disclose the limitations as shown in the rejections above. Rogers and DeLuca do not disclose the following limitation. However, Rogers further discloses *"initiating automated contact to a third party on a hierarchical third party list further includes prompting the individual to confirm that automated contact to the third party should be made"* (See at least Fig. 10, column 17; lines 15-67).

40. Claim 26:

Rogers and DeLuca disclose the limitations as shown in the rejections above. Rogers and DeLuca do not disclose the following limitation. However,

Rogers further discloses *“further including placing the third party contacts in tiers of third party contacts wherein at least one tier includes multiple third party contacts”* (See at least Fig. 10, column 17; lines 15-67).

41. **Claim 27:**

Rogers and DeLuca disclose the limitations as shown in the rejections above. Rogers and DeLuca do not disclose the following limitation. However, Rogers further discloses:

- *requesting automated contact to the third party on the hierarchical third party list by the individual; and* (See at least Fig. 10, column 17; lines 15-67).
- *initiating the automated contact to the third party on the hierarchical third party list at the request of the individual* (See at least Fig. 10, column 17; lines 15-67).

42. **Claim 29:**

Rogers and DeLuca disclose the limitations as shown in the rejections above. Rogers and DeLuca do not disclose the following limitation. However, Rogers further discloses *“further including adjusting the expected data counts for the sensor based upon the statistical change in the data counts”* (See at least Fig. 2, Fig. 2A, column 9, lines 24-30).

43. Claims 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers (US 6,957,107 B2) in view of DeLuca (US 6,440,067) further in view of Official Notice.

44. **Claim 28:**

Rogers and DeLuca disclose the limitations as shown in the rejections above. Rogers and DeLuca do not disclose *"identifying a sensor that is not transmitting data counts based on the statistical change in the data counts of the sensor relative to expected data counts for the sensor"*. However, the Examiner takes **Official Notice** that it is old and well-known in the Electronics arts that a non-transmitting sensor would work improperly. Therefore, a failed sensor would compromise the accuracy of the statistical threshold data counts. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have sensors that work properly to obtain the best possible data counts to maximize the quality of healthcare provided for patients.

Response to Arguments

45. Applicant's arguments with respect to claims 1, 5-38 have been fully considered but are not persuasive. Applicant's arguments will be addressed herein below in the order in which they appear in the response filed 12/15/09.
46. (1) Applicant argues on the basis that the David and Rogers references do not teach "determining a behavior routine of the individual with the computing device based on record activations of the sensor; analyzing the recorded sensor activations with the computing device to determine a behavior routine; identifying a change in the behavior routine with the computing device based on the analysis of the recorded sensor activations". Rather, DeLuca's remotely monitored activity system recognizes signal patterns of routine physiological daily living activities.
47. (2) Applicant argues on the basis that the David and Rogers references do not teach "an analysis unit to analyze the tabulated signals to determine a behavior routine and identify changes in the behavior routine". Rather, DeLuca's remotely monitored activity system analyzes the data of the test subject performing functional activities.
48. (3) Applicant argues on the basis that the David reference does not teach "determining a behavior routine of the individual based on the sensed data counts". Rather, DeLuca's remotely monitored activity system processes and establishes sensor signals of pre-determines muscle function of patients.

Conclusion

49. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
50. Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **TERESA WOODS** whose telephone number is (571) 270-5509. The examiner can normally be reached on Mon-Fri, 7:30am - 5:00 pm, east.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry O'Connor can be reached on (571) 272-6787. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or (571) 272-1000.

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12/31/09

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